**PCC.PHLEB.1.0 VENIPUNCTURE-EVACUATED TUBE AND BUTTERFLY**

**PURPOSE**

The quality and value of a laboratory test result begins with the quality of the specimen. This SOP details the process required to safely obtain a quality venous blood specimen through venipuncture.

**SCOPE**

This SOP applies to all MACL facilities where blood specimens are collected.

**OWNERS**

QA and Safety Officer

PCC Supervisors

**RELATED POLICIES AND PROCEDURES**

QA.SPEC.1.0 *Specimen Collection—Verification of Patient Identification*

PCC.SPCOL.1.0 *Identification of Patients and Specimens*

**EQUIPMENT**

A. Disposable Tube holder or disposable syringe

B. Disposable safety needle for evacuated tubes with 22 or 21 gauge needle, or butterfly for evacuated tubes with 23 or 21 gauge needle.

C. Evacuated tube(s)

D. Tourniquet

E. 70% isopropyl alcohol swab

F. 2”x2” gauze

G. Adhesive coverage

H. Sharps container

I. Gloves

**PROCEDURE**

A. NOTE: Body substance (bloodborne pathogens) precautions and safety procedures are to be followed with all patient contacts. Refer to the MACL safety policies and procedures.

B. Before performing venipuncture:

1. Wash hands per policy stated in SAFE.BIOHAZ.1.0 BBP Exposure Control/Infection Control Plan

a. This includes all process stated in SAFE.BIOHAZ.1.0 of handwashing, including rubbing hands together for at least 20 seconds; or, if using sanitizer, that sanitizer be used at most 5 times before handwashing is performed per policy.

2. Identify patient per PCC.SPCOL.1.0 *Identification of Patients and Specimens*

3. If a fasting specimen is required, ask the patient when he or she last ate.

4. Screw safety needle or butterfly into the holder.

5. Select tube(s) needed.

6. Apply tourniquet.

NOTE: In hospital inpatient settings, discard tourniquets after use on a patient (single use). For outpatient settings (eg, PCCs), discard tourniquets after use on no more than 3 patients or when visibly soiled. However, hospital infection control policy takes priority over this outpatient practice, so if there is a hospital requirement for single use tourniquets with both inpatients and outpatients, this practice should be followed.

7. Ask patient to close hand.

8. Select a vein. Do not leave tourniquet on for longer than one (1) minute. Foot or ankle veins may be used ***only*** after the patient’s physician has approved their use.

9. Clean the venipuncture site with 70% isopropyl alcohol in concentric circles outward.

10. Put on gloves.

C. Perform venipuncture.

1. While securely grasping the needle holder or the butterfly needle with one hand, use the other to push the tube to the end of the holder.

2. Allow tube(s) to fill completely. The required order of draw is:

a. Sterile—Blood culture

b. Citrate—Light blue stopper (citrate)

c. Serum—Clot tube, red stopper (non-additive)

d. Serum—Clot activator, gel tube, gold or tiger stopper (serum separator)

e.Heparin—Green stopper (also PST with gel)

f. EDTA—Lavender, pink, or royal blue stopper

g. Glycolytic Inhibitor—Gray stopper (fluoride)

NOTE: When using a butterfly for coagulation testing (light blue stopper tube) a discard tube to displace the air in the butterfly tubing MUST be drawn.

3. As tubes with additives are removed, they must be inverted 8 to 10 times.

4. Ask patient to open hand.

5. Release tourniquet.

6. Lightly place dry 2”x2” gauze above the venipuncture site.

7. Remove needle from arm. Engage safety shield over needle or slide safety shield over butterfly needle. Discard entire apparatus into sharps container.

8. Apply pressure to the site until bleeding has stopped. Patient may assist if able.

9. Label all tubes with the computer label if available, or hand label in front of the patient. Patient samples must be labeled with the following:

a. Patient’s first and last name

b. Patient’s date of birth (preferable in a non-hospital setting) or a second identifier such as the patient’s medical record number

c. Date and time collected

d. Phlebotomist’s initials

10. Apply adhesive coverage to venipuncture site. Advise patient to leave bandage on the site for at least 30 minutes.

D. If unsuccessful in collecting blood, attempt second venipuncture using a different site if another acceptable site is found and you and the patient feel comfortable with a second attempt. Use new equipment when making any venipuncture attempt.

E. If second attempt is unsuccessful or either the patient or phlebotomist feels uncomfortable with a second attempt, have another phlebotomist check for an acceptable site. Once an acceptable site is found, the second phlebotomist will make the attempt.

F. For patients seen at a PCC site, if a second phlebotomist is unavailable, or if an acceptable site cannot be located, the patient should be referred to another PCC site. Consider patient convenience, along with PCC site associate experience, when making a referral. If the patient is a child, refer to PCC.PHLEB.7.0 *Venipuncture-Pediatric Specimen Collection* for specific referral instructions. For inpatients at HBLs, follow hospital policy.

**REFERENCES**

A. Hoeltke, Lynn B., *The Complete Textbook of Phlebotomy,* 2nd edition, Albany, N.Y., Delmar Publishers, 2000

B. Kovanda, Beverly M., *Phlebotomy Collection Procedures for the Healthcare Provider,* Albany, N.Y., Delmar Publishers, 1998

C. Clinical and Laboratory Standards Institute (CLSI). *Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture; Approved Standard—Sixth Edition.* CLSI document H3-A6. Clinical and Laboratory Standards Institute; Wayne, PA: 2007.